THIRD ENERGY EFFICIENCY PLAN (Plan 3)

North Shore Gas Company

June 1, 2017 — May 31, 2020

PEOPLES GAS
NATURAL GAS SAVINGS PROGRAM
REDUCE TODAY. SAVE TOMORROW.

NORTH SHORE GAS
NATURAL GAS SAVINGS PROGRAM
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Index page

1. Introduction

In July of 2009, then Illinois Governor Quinn signed into law Public Act 096-0033, establishing energy efficiency goals, energy efficiency program filing requirements and cost recovery mechanisms, and energy efficiency program expenditures for Illinois gas utilities serving more than 100,000 gas utility customers. Under Section 8-104 of the Public Utilities Act (220 ILCS 5/8-104) ("Section 8-104"), the natural gas energy efficiency goals for each affected natural gas utility is a cumulative reduction of 8.6% of natural gas deliveries by May 31, 2020.

In addition to the mandated energy-efficiency reductions in natural gas deliveries, Section 19-140 of the Public Utilities Act (220 ILCS 5/19-140) requires each gas utility to create an On-Bill Financing program for energy efficiency upgrades completed by utility customers. Both electric and natural gas utilities offer On-Bill Financing programs to allow certain customers to pay for approved energy efficiency measures on their utility bills. Those energy efficiency measures are financed through a loan with a financial institution participating in the program.[1]

Section 8-104(f) provided the standards for approval. Plan 3 for North Shore Gas, an energy efficiency plan meetings these standards of approval as:

1. Demonstrate that the proposed energy efficiency measures will achieve the identified requirements that are identified in Section 8-104(c) as modified by Section 8-104(d) under Section 8-104(f)(1).

   North Shore Gas meets the demonstration that it will meet the energy efficiency goals through its modified savings goals. See NS-PG Ex. 1.0 pp.13-19, p.26; NS-PG Ex.1.2, p.6.

2. Present specific proposals to implement new building and appliance standards that have been placed into effect under Section 8-104(f)(2).

   North Shore Gas meets the demonstration that it provide measures and programs for new building and appliance standards. See NS-PG Ex. 1.0 pp.13-19, p.26-27.

3. Present estimates of the total amount paid for gas service expressed on a per therm basis associated with the proposed portfolio of measures designed to meet the identified requirements under Section 8-104(f)(3).

   North Shore Gas meets the demonstration that is has provided a cost per therm. See NS-PG Ex. 1.0 p.27.

[1] The Commission approved the Companies' On-Bill Financing program in Order No. 10-0090 (Order, June 2, 2010). More recently, the Public Act 098-0586 allows any measure that is approved as part of the utility's energy efficiency portfolio as well as small commercial customers' energy efficiency improvements to be eligible for an On-Bill Financing program.

4. Demonstrate coordination with the Illinois Department of Commerce and Economic Opportunity (the “DCEO” or “Department”) to present a portfolio of energy efficiency measures proportionate to the share of total annual utility revenues in Illinois from households at or below 150% of the poverty level, including energy efficiency programs provided by the DCEO that are targeted to households with incomes at or below 80% of area median income requirements under Section 8-104(f)(4)

   North Shore Gas meets the demonstration that is coordinating with DCEO on low income measures and will explore expansion of a North Shore Gas low income program during the course of Plan 3. See NS-PG Ex. 1.0 pp.11-14, 23-24, 28-29, NS-PG Ex. 1.2 19-20.

5. Demonstrate that the overall portfolio of energy efficiency measures, not including programs targeting income qualified customers, is cost-effective using the Total Resource Cost (“TRC”) test and represents a diverse cross-section of opportunities for customers of all rate classes to participate under Section 8-104(f)(5).

   North Shore Gas meets the demonstration of overall program cost-effectiveness using the TRC test and its programs provide a diverse cross-section of opportunities to all ratepayers. See NS-PG Ex. 1.0, p. 29; Exhibit 1.2, pp. 8, 19-41.

6. Include a proposed cost-recovery tariff mechanism to fund the proposed energy efficiency measures and to ensure the recovery of the prudently and reasonably incurred costs of the Illinois Commerce Commission (“Commission”) approved programs under Section 8-104(f)(7).

   North Shore Gas meets the demonstration that is has a tariff in place to recovery prudently and reasonable included energy efficiency costs. See NS-PG Ex. 2.0, p. 8).

7. Provide for quarterly status reports tracking implementation or and expenditures for the utility’s portfolio of measures, an annual independent evaluation of the cost-effectiveness of both the utility's and the DCEO's portfolio of measures, as well as a full review of the 3-year results of the broader net program impacts and, to the extent practical, adjustment of the measures on a going-forward basis as a result of the evaluations. The resources dedicated to evaluation shall not exceed 3% of portfolio resources in any given year.

   North Shore Gas will provide said updates and tracking. See NS-PG Ex 1.0 pp. 31-34, Exhibit 1.2 pp. 5-7).

Further, North Shore Gas will allocate no more than 3% of energy efficiency measures for demonstration of breakthrough equipment and devices.

The plan demonstrates that North Shore Gas' proposed energy efficiency portfolio will, in a prudent and cost-effective way, use the limited budget allowed by Section 8-104(d) (the "Cap") to provide energy efficiency measures to North Shore retail customers. The proposed Third Energy Efficiency Plan for PY7-9 (the "Plan" or "Plan 3") cannot, however, meet the cumulative natural gas delivery reductions identified in Section 8-104(c)(4)-(6) within the Cap under Section 8-104(d). This plan documents the development of the Plan including general research and specific program plans while remaining consistent with the requirements and guidelines outlined in Section 8-104.

Further North Shore Gas execution of its Plan 3 will meet the following requirements:

1. **Adjustable Savings Goals**
    a. North Shore and Peoples Gas shall each file a completed Adjustable Savings Goal Template for the Section 8-104 Programs and Measures as an attachment to its Plan 3 (see NS-PG Exhibit 1.6.)
    b. For purposes of the Section 8-104 programs Adjustable Savings Goals policy approved in the Policy Manual, the measure participation levels identified in the approved Plan 3 to derive the energy savings goals shall be fixed for the entirety of Plan 3, in the adjustable savings goal calculation.
    c. Consistent with Section 6.2 of the Illinois Energy Efficiency Policy Manual Version 1.0, prior to the start of PY7, the Peoples Gas and North Shore annual energy savings goals for the entire Plan 3 period will be adjusted to align them with the evaluator's final recommended net-to-gross ("NTG") values. The Parties will make good faith efforts to reach consensus at the SAG and with the independent evaluators concerning such final recommended NTG values.
    d. In advance of filing the first updated Adjustable Savings Goal Template with the Commission, Peoples Gas and North Shore Gas will present to the SAG its first updated Adjustable Savings Goal Template containing the savings goal adjustments due to the changes reflected in the consensus IL-TRMv6.0 as well as the NTG updates, where applicable, resulting from the existing stakeholder consensus processes in place in order to provide stakeholders with an opportunity to ask questions concerning the updated Adjustable Savings Goal Template and reach agreement on the adjusted savings goal.
    e. NS-PG agree to abide by the Adjustable Savings Goal Policy Guidelines dated August 1, 2016 pursuant to the Policy Manual, as may be amended through agreement by NS-PG, ICC Staff and participating signatories to this Agreement.

2. **Net-To-Gross Values used in Plan 3:** Consistent with Section 7.2 Net-to-Gross ("NTG") Policy of the Policy Manual the NTG values used in the North Shore and Peoples Gas Plan 3 are subject to change during the implementation of the Plan for evaluation purposes through an annual review and vetting process through the SAG involving the independent evaluator's recommended deemed NTG values for the upcoming program year.

3. **Annual Ex Post Total Resource Cost ("TRC") Test Evaluation:** NS-PG shall direct its independent third-party evaluator to conduct an ex post TRC cost-effectiveness analysis annually during the course of the 3-year portfolio plan. NS-PG shall also direct its independent third-party evaluator to conduct a TRC cost-effectiveness analysis at the conclusion of the 3-year program plan pursuant to Section 8-104(f)(8) of the Act. Both the annual ex post TRC analysis and the 3-year TRC cost-effectiveness analysis shall include both the gas and electric costs and benefits for the joint energy efficiency programs that NS-PG offer in conjunction with another Program Administrator such as ComEd.

4. **Updates to the Illinois Energy Efficiency Policy Manual:**
    a. NS-PG shall participate in Policy Manual Subcommittee discussions for Illinois Energy Efficiency Policy Manual Version 2.0, following Commission approval of the Electric Program Years 10-12 and Gas Program Years 7-9 Energy Efficiency Plans.
    b. While the policy manual is required to be reviewed annually and updated as needed,[2] NS-PG shall make good faith efforts to assist in the development of the second version of the policy manual by no later than August 1, 2018 of the second program year of the Gas Program Year 7-9 Energy Efficiency Plan, with a filing at the Commission requesting approval of the updated policy manual.[3]
    c. NS-PG shall make good faith efforts to expeditiously reach consensus regarding an Illinois Energy Efficiency Policy Manual Version 2.0.

5. NS-PG shall make good faith efforts to have completed statewide common reporting templates for Program Administrator Quarterly Reports required by Section 6.5 of the Illinois Energy Efficiency Policy Manual Version 1.0 available in advance of filing the first NS-PG Quarterly Report for PY7. NS-PG also shall make good faith efforts to have completed statewide common reporting templates for Program Administrator Annual Summary of Activities (Annual Reports) required by Section 6.6 of the Illinois Energy Efficiency Policy Manual Version 1.0 available in advance of filing the fourth NS-PG Quarterly Report for PY7.

6. **Evaluator Independence:** NS-PG shall put protocols into place to ensure that evaluator independence is maintained, as required by Section 8-104 of the Act.[4] The evaluator would not be "independent" as required by statute if the Program Administrator had control over the Evaluator.[5]
    a. Evaluator independence protocols include:
        i. Any contract between NS-PG and the independent evaluator shall provide that the Commission has the right to:
            1. Approve or reject the contract, in whole or in part;

[2] See Illinois Energy Efficiency Policy Manual Version 1.0, Section 2.4, Updates to this Policy Manual.
[3] Interested SAG participants shall submit proposed policies to SAG Facilitation on or before March 1, 2018, utilizing the Proposed Policy Template, unless SAG Facilitation establishes an earlier deadline. Additionally, if the Commission directs SAG to resolve policy issues outside of this Policy Manual update process, prior to the August 1, 2018 deadline, SAG Facilitation will convene the appropriate SAG participants in a timely manner.
[4] 220 ILCS 5/8-104(f)(8).
[5] ICC Order on Rehearing Docket No. 07-0539 at 3 (March 26, 2008); ICC Order on Rehearing Docket No. 07-0540 at 2-4 (March 26, 2008). Retrieved from https://www.icc.illinois.gov/downloads/public/edocket/218815.pdf.

2. Direct NS-PG to terminate the evaluator, if the Commission determines that the evaluator is not acting independently, or is unable or unwilling to independently evaluate the energy savings performance and cost-effectiveness of the NS-PG efficiency programs; and
3. Ensure that the Program Administrator does not have the ability to impede the independence of the Evaluator.

ii. NS-PG shall submit any contract and scope of work with the independent evaluator as a compliance filing in the applicable Energy Efficiency Plan docket within fourteen (14) days of execution.
iii. Evaluators have the sole discretion to develop EM&V work plans, subject to input and comments from all interested stakeholders and Commission Staff, as described in Policy Manual Version 1.0, Section 10.1 (EM&V Work Plans).
iv. Evaluators shall ensure that the data used in the evaluations can be made available to the Commission upon request.

b. The evaluator contract with NS-PG shall automatically terminate upon a Final Order of the Commission finding that the contract should be terminated, after issuance of notice and hearing and an opportunity for NS-PG, the evaluator, and other interested parties to be heard.
c. In the event that NS-PG or the evaluator issues a notice of termination or notice of default of the contract, it shall contemporaneously provide a copy of such notice to the Commission.

Further, the following values shall be used for avoided costs in the Plan 3 filings:

- Electricity Avoided Costs: updated with data received from ComEd 8/18/16.
- Natural Gas Avoided Costs: updated the forecast to utilize an average annual escalator based upon the EIA 2016 Annual Energy Outlook Henry Hub.
- Escalation rate: 2.3% based upon the EIA 2016 Annual Energy Outlook.
- Carbon adder: $25 per ton for natural gas and electric, starting in 2020.

2. Executive Summary

North Shore, a wholly-owned subsidiary of Integrys Holding LLC, which is a wholly-owned subsidiary of WEC Energy Group, proposes to implement a portfolio of natural gas energy efficiency programs and On-Bill Financing as required by Section 8-104 and Section 19-140 of the Public Utilities Act. The overriding objectives of this Plan are to attempt to achieve the indicated energy efficiency goals as cost-effectively as possible and to provide programs to both residential and commercial/industrial ("C&I") customers.

In the Plan 3, North Shore has designed flexible, scalable, best practice programs that allow for partnering with Commonwealth Edison Company ("ComEd"), the electric service provider in North Shore' service territory, to streamline administration and delivery while maximizing customer participation based on researched market potential. North Shore also worked with the neighboring gas utilities Ameren Illinois and Nicor Gas to provide consistency in program design where possible.

The savings goal is based on 2009 calendar year throughput. The proposed budget and Cap is based on forecasted revenues for Program Year ("PY") 7 (June 1, 2017 to May 31, 2018) and are as follows:

Table 1: Statutory 2% Cap on Recoveries from Customers

	NORTH SHORE GAS
Total Retail Natural Gas Service	$197,899,543
Total 2% Statutory Budget Cap	$3,957,991

The proposed budget and savings estimates are illustrated below. The budget is consistent with the statutory Cap. The savings estimates fall below the statutory targets.

Table 2: Overall Goals and Budgets

North Shore Gas		PY7	PY8	PY9	Total
Throughput (Therms)		346,897,375	346,897,375	346,897,375	1,040,692,125
Statutory Savings Goal (Percent)		1.40%	1.50%	1.50%	n/a
Statutory Savings Goal (Therms)		4,856,563	5,203,461	5,203,461	15,263,485
Utility Savings (Therms) - 80% of Statutory Goal		3,885,250	4,162,769	4,162,769	12,210,788
DCEO Savings (Therms) - 20% of Statutory Goal		971,313	1,040,692	1,040,692	3,052,697
Utility Proposed Modified Savings Goal (Therms)		1,456,985	1,432,442	1,456,985	4,346,413
Utility Proposed Modified Savings Goal (Percent)		0.42%	0.41%	0.42%	n/a
Budget Cap	**$3,958,000**	**PY7**	**PY8**	**PY9**	**Total**
Utility Allocation @	**75%**	$2,968,500	$2,968,500	$2,968,500	$8,905,500
Research & Development (Emerging Technologies)		$89,055	$89,055	$89,055	$267,165
EM&V Implementation		$89,055	$89,055	$89,055	$267,165
Portfolio Administration (Including Planning)		$300,000	$300,000	$300,000	$900,000
Portfolio Marketing & Education		$200,000	$200,000	$200,000	$600,000
Studies (i.e., Potential Studies External costs)			$240,000		$240,000
Total Portfolio Costs		$678,110	$918,110	$678,110	$2,274,330
Available Program Budget		**$2,290,390**	**$2,050,390**	**$2,290,390**	**$6,631,170**
NSG Subtotal		$2,968,500	$2,968,500	$2,968,500	$8,905,500
DCEO Allocation @	25%	$989,500	$989,500	$989,500	$2,968,500
NSG w/DCEO Subtotal		$3,958,000	$3,958,000	$3,958,000	$11,874,000

Pursuant to Section 8-104, North Shore is responsible for 80% of the natural gas savings under the statutory goal of Section 8-104(e), using no more than 75% of the budget under the Cap, with the DCEO responsible for 20% of the required natural gas savings using no more than 25% of the Cap's budget.

The Plan has many offerings that incent customers to become more energy efficient. The offerings are integrated with energy efficiency awareness and education efforts designed to encourage customers to make more informed energy use decisions.

The following objectives guided the development of the portfolio of programs. The portfolio will:

- Meet legislative requirements to implement a portfolio of programs that will produce cost-effective savings to the extent possible within the budgetary cap. Cost-effectiveness at the portfolio level and 3-year program level.[6]
- Provide opportunities for customers of all rate classes to participate in the programs.[7]
- Demonstrate coordination with the Illinois Department of Commerce and Economic Opportunity (the "DCEO" or "Department") to present a portfolio of energy efficiency measures proportionate to the share of total annual utility revenues in Illinois from households at or below 150% of the poverty level, including energy efficiency programs provided by the DCEO that are targeted to households with incomes at or below 80% of area median income.
- Build on past experiences and proven technologies, while introducing limited emerging technologies to the market to spur future demand that would aid in market transformation.
- Be easily scalable and allow for flexible responsiveness to market conditions.

Due to the needs associated with obtaining as much cost-effective energy savings as possible within the Cap, the portfolio has been streamlined and simplified. The North Shore portfolio is grouped into two major program areas, each with three participant paths. The programs have been grouped based on targeted audience and allow a more focused and comprehensive approach from the customer's point of view. The Residential Program has elements intended to provide a variety of energy efficiency programs for residential dwellings and multi-family units. The Business Program has provisions intended to provide a range of energy efficiency programs for the multitude of small business, commercial, and industrial customers. Each program contains three program paths — Outreach and Education, Assessments, and Rebates/Grants. Each program path contains multiple categories (e.g., Outreach and Education includes behavior change and energy efficiency education).

The following table summarizes the proposed portfolio. The program details are provided in Section 3.6.

[6] Excluding programs that target eligible low income customers.
[7] Excluding electric generation and opt-out customers.

Table 3: Energy Efficiency Portfolio Summary

Programs	Residential		Business	
Market Offerings	Single Family	Multi-family	Small Business	C&I
Path				
Outreach & Education				
- Behavior	x	x		
- EEE	x	x		
Assessments				
- High level (w/DI)	x	x	x	x
- In Depth		x		
- Gas Optimization		x		x
- RCx				x
- Engineering Studies				x
Rebates/Grants				
- Staffing				x
- Standard Rebate	x	x	x	x
- Partner Trade Ally	x	x	x	
- Local Orgn Partner				
- Custom		x	x	x

Table 4A provides a summary of the Total Resource Cost ("TRC"), savings and budget by program and Table 4B provides a more detailed budget for each program. "PY" means program year. For example, PY7 is the period June 1, 2017 through May 31, 2018. TRC is a benefit cost test (described in Section 3.1.1). The portfolio TRC benefit cost ratio is estimated at 2.11.

Table 4A: Portfolio Summary

North Shore Gas		PY7		PY8		PY9	
Sector	TRC	Therm Savings	Budget	Therm Savings	Budget	Therm Savings	Budget
Residential	2.04	856,193	$1,290,000	831,650	$1,110,000	856,193	$1,290,000
Business	2.12	600,792	$1,000,390	600,792	$940,390	600,792	$1,000,390
TOTAL	**1.74**	**1,456,985**	**$2,290,390**	**1,432,442**	**$2,050,390**	**1,456,985**	**$2,290,390**

Table 4B: Program Budget Detail

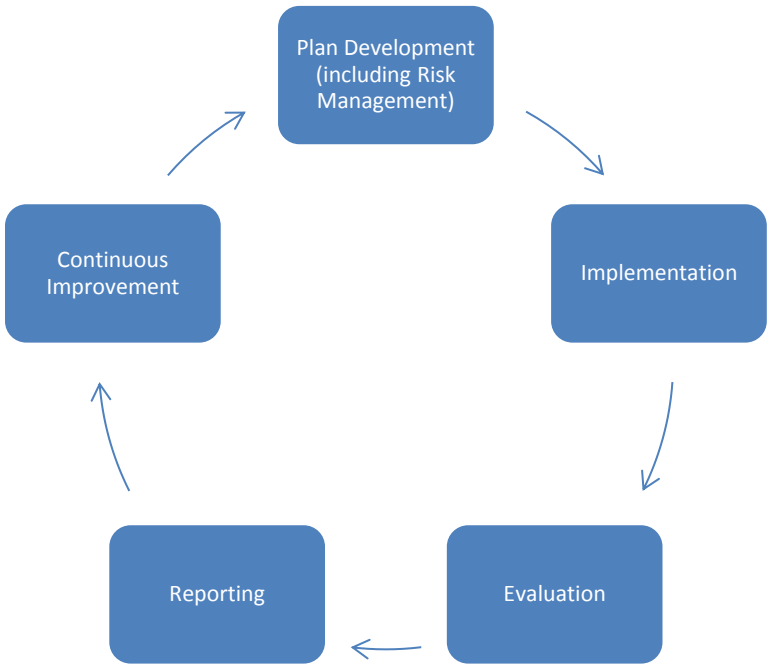
North Shore Gas	PY7			PY8			PY9		
Program	Impl/Mktg	Incentive	Total	Impl/Mktg	Incentive	Total	Impl/Mktg	Incentive	Total
Residential	$737,985	$552,015	$1,290,000	$606,217	$503,783	$1,110,000	$737,985	$552,015	$1,290,000
Business	$361,854	$638,536	$1,000,390	$301,854	$638,536	$940,390	$361,854	$638,536	$1,000,390
TOTAL	**$1,099,839**	**$1,190,551**	**$2,290,390**	**$908,071**	**$1,142,319**	**$2,050,390**	**$1,099,839**	**$1,190,551**	**$2,290,390**

Note: Evaluation is not included in individual program budgets but at the portfolio level.

3. The Components of the Plan

The creation of this Plan adheres to a rigorous planning process, beginning with market analysis and a potential study and culminating in program design. The diagram in Figure 1 provides an illustration of the energy efficiency planning process and coincides with the topics in the balance of this section.

Figure 1: Energy Efficiency Planning Process Overview



A market potential assessment ("Market Potential Study") was performed by SeventhWave. The purpose of the study was to (1) identify the economic potential for natural gas savings in the North Shore service territory, (2) identify opportunities for program enhancements and new program offerings to realize this potential and (3) estimate the achievable potential gas savings and program costs for these opportunities. The Market Potential Study, along with the experience gained and lessons learned from the previous Plan period, is the basis for the development of this Plan 3.

North Shore is committed to continuously improving the design and delivery processes for its programs. During the course of the Plan 3, as done during the prior Plan period, programs will be improved and refined on an ongoing basis, particularly as program evaluation and reporting activities identify opportunities for program enhancement.

3.1 Plan Development

Plan development incorporates a number of tasks that help structure the portfolio design process and the steps that follow.

- Develop a database of energy saving measures, including estimated costs, energy savings and measure life. The energy savings measures are compared to baseline conditions – current practices, if available, or, alternatively, minimum standards. Measures are screened for cost-effectiveness based on North Shore specific avoided cost and other data.
- Experiences by other utilities, consultants and program implementation contractors and information on generally accepted best practices are shared and put into the context of the North Shore market to ensure participants are available and the measures will meet their needs.
- Measures are bundled into programs that are logical and facilitate participation from the customers' perspectives. Best practices and the experiences of other program administrators and implementers are taken into consideration when developing the program design. Program level budgets are prepared and the program is screened for cost-effectiveness. All programs are finally bundled into one portfolio and the total portfolio, including general costs that are not program specific, is screened for cost-effectiveness.
- Perform a risk analysis and identify risk mitigating measures.

3.1.1 Benefit Cost Analysis

There are many methods used to assess the cost-effectiveness of an energy efficiency measure. Section 8-104(f) requires using the total resource cost test ("TRC") as the primary method to determine cost-effectiveness of the portfolio.

TRC measures the net costs of an energy efficiency program as a resource option based on the total costs of the program, including both the participants' and the utility's costs. The TRC test represents the effects of a program on both participating customers and those not participating in a program. The benefits are the avoided supply cost – the reduction in transmission, distribution, commodity and capacity costs valued at marginal cost for the periods when there is a reduction in usage of natural gas. The costs in this test are the program costs paid by the utility and the participants plus the increase in supply costs for the periods in which demand is increased. Thus, all incremental equipment costs, operation and maintenance, cost of removal and administration costs, no matter who pays for them, are included in this test.

The benefit cost ratio resulting from the application of the TRC test is the ratio of the discounted total benefits of the program to the discounted total costs over a specified time period. A benefit cost ratio above one indicates that the program is beneficial to the utility and its customers on a TRC basis.

Even though the TRC test is prescribed by Section 8-104(f), there are three other cost-effectiveness tests that analyze the programs from different perspectives. The additional tests are the Participant Test, the Ratepayer Impact Measure ("RIM") Test, and the Utility or Program Administrator Cost Test.

The Participant Test is the quantifiable benefits and costs to the customer due to participation in a program from the participant's perspective. The benefits include a reduction in the participant's bill, and incentives paid to them. The costs are out-of-pocket expenses incurred as a result of participation in the program plus any increases to utility bills.

The RIM Test measures what happens to customer's bills or rates due to changes in utility revenues and operating costs caused by a program. The benefits are the savings from avoided supply costs. The costs are the program costs incurred by the utility and/or other entities for creating or administering the program, incentives paid to the participant, decreased revenues for any periods for which demand decreased, and increased supply costs for instances when demand increased.

The Utility or Program Administrator Cost Test measures the net costs of a program as a resource option based on the costs incurred by the program administrator, excluding any net costs incurred by the participant. The benefits are the avoided supply costs of energy and demand (similar to the TRC benefits). The costs are the program costs incurred by the administrator, the incentives paid to the customers, and the increased supply costs for the periods in which demand is increased.

To determine energy efficiency measures that should be considered opportunities for achievable energy savings, a comprehensive benefit cost analysis was conducted on a wide range of measures that affect natural gas consumption across all customer classes. The benefit cost tests were performed using data specific to North Shore. When the TRC test results produce a value greater than one for any given measure or bundle of measures, it is judged to be a cost-effective application, implying that it is more beneficial to implement the energy efficient technology. Measures are grouped into programs and budget amounts are allocated. Then the TRC test is run again on each program, or bundle of measures, to determine cost-effectiveness. Table 4A in Section 2 above included the TRC test results for each proposed program and the total portfolio.

For this Plan, the avoided costs also included a 7.5% natural gas and a 10% electric adder for Non-Energy Benefits ("NEBs") as well as a $0.13 per therm and $0.01 per kWh adder for greenhouse gases.[8] The Illinois Technical Reference Manual ("TRM")[9] was utilized to calculate savings for measures that were specified in the TRM. Section 8-104(f) requires that North Shore meet a TRC of 1.0 or higher at the portfolio level.

[8] Greenhouse gas adders were developed from the Department of Energy 2016 Annual Energy Outlook.
[9] Illinois Statewide Technical Reference Manual for Energy Efficiency Version 5.0 (June 1, 2016), developed by members of the Illinois Energy Efficiency Stakeholder Advisory Group.

In addition to the results of the four tests mentioned above, this Plan also provides the cost per therm saved based on levelized (life cycle) savings. This measures the lifetime savings against the program costs, rather than just the first year savings.

3.1.2 Current and Future Coordination with Stakeholders

North Shore recognizes the importance of obtaining agreement among stakeholders in all phases of the Plan life cycle from planning and program design, to implementation, evaluation, tracking and cost recovery. Stakeholders were invited to participate as intervenors. Discussions were held with stakeholders that chose to participate and signed a non-disclosure.

North Shore will continue to actively participate in the Stakeholder Advisory Group ("SAG") and the Technical Advisory Committee of the SAG ("TAC"). These forums allow all stakeholders to work together to ensure high quality, high performance energy efficiency programs in the State of Illinois. In addition, North Shore will continue to have conversations with utilities to discuss what's working, what's not and how to improve coordination where it makes sense and is mutually beneficial for both entities.

3.2 Risk Management

The objective of risk management is to limit the liability to North Shore and develop a proactive plan to identify and resolve the most critical and/or most likely potential risk events. It is particularly important in the planning and development stages to document risks and identify mitigation and contingency options that can be applied to risks.

North Shore defines a risk as any factor (event) that may potentially interfere with success of the portfolio in reaching its objectives. A risk is not a problem; a risk is the possibility that a problem might occur. By recognizing potential problems, North Shore can attempt to avoid a problem through proper actions, or risk responses. The best mitigation is to take action upfront to prevent a risk event from occurring. If a risk cannot be prevented, contingency planning involves the preparation of prescribed actions should a risk event be triggered.

North Shore' assessment of the portfolio concluded that there are currently five main risks that require responses. These risks are:

1. Performance risk: The risk that the programs do not deliver expected results.
2. Market risk: The risk that the program participation will suffer as a result of poor economic conditions.
3. Technology risk: The risk that certain technologies or measures fail to deliver expected savings.
4. Evaluation risk: The risk that independent evaluation, measurement and verification ("EM&V") will conclude that either deemed savings, plan assumptions, or estimates fall short of what implementers have estimated.

5. Regulatory risk: The risk that achievements are not recognized and cost recovery is affected.

North Shore' risk responses to these identified risks are as follows. They do not necessarily correlate to the above risks on a one-on-one basis.

- Transfer performance related risk by entering into a performance-based contract with an experienced program implementer with a proven track record, Franklin Energy.
- Mitigate technology and market risks by designing a diversified portfolio that does not rely heavily on one single program or technology.
- Mitigate market risks by designing programs that help overcome many of the market challenges and barriers.
- Mitigate technology risk by incorporating technologies and measures based on market research and technologies with proven results in similar markets.
- Mitigate evaluation risk by using TRM algorithms if available and obtain SAG agreement on the net-to-gross ("NTG") ratios to be used in planning assumptions using EM&V results. The Policy Manual, which was recently approved by the Commission, allows for goals to be adjusted that are beyond the control of the utility. The annual energy savings goals will be adjusted to align with (1) changes to TRM values and (2) Evaluator's recommended NTG values for the entire Plan period prior to the start of the first Plan year (i.e., prior to PY 7). This change drastically, if not completely, removes technology and evaluation risk.
- Mitigate regulatory risk by clearly stating objectives, expectations and assumptions in the plan and obtaining approval of these expectations and assumptions. Continue to work closely with SAG members to develop processes and expectations that minimize negative retrospective applications that exacerbate regulatory risk.

Risk management is an on-going process; it is not performed once and then set aside. Risk identification, management, and resolution continue after the portfolio is launched. New risks will develop as the programs evolve and external and internal situations change.

3.3 Implementation

The majority of the programs and paths outlined in this Plan are currently being implemented and ongoing adjustments are applied to improve program processes. Implementation planning involves a continual assessment of program and measure mix to assure that the portfolio is on track to meet goals. As a result, in subsequent years, North Shore may add/subtract measures or modify the scope of a program based on market data, changes in technology, or other relevant information.

In addition to ensuring that North Shore reaches savings and budget goals in a cost-effective way, some of the key goals identified in implementation planning are:

- Continue to implement new measures or remove less cost-effective measures in a seamless manner, working with affected trade allies.
- Continue to coordinate with the DCEO.
- Continue building on the trade ally network.
- Work more closely with local organizations and communities to increase awareness of and activity in the programs.
- Continue to coordinate with ComEd's complementary electric energy efficiency offerings where it makes sense and is mutually beneficial to both entities.

The Research & Development budget focuses on supporting:

- Training and compliance with new Codes and Standards. It is a joint effort among the DCEO, all the utilities, and other interested parties.
- Participating with the Gas Technology Institute in their effort to research and prepare new gas technologies for commercialization.

3.3.1 Overall Management Strategy

Franklin Energy will continue to provide turnkey energy efficiency implementation services for North Shore. Franklin Energy has identified key positions for the ongoing management of the portfolio and has developed a program staffing structure as described below.

The Executive Manager and Regional Director will be responsible, with the approval of North Shore, for:

- Portfolio and program strategy.
- External and internal coordination.
- Budget and financial management.
- QA/QC design / internal EM&V.
- Marketing and communication strategy.

Franklin Energy staff, working under the direction of the Regional Director, will be responsible for:

- Implementation planning.
- Process design and implementation.
- Program implementation.
- Management of third party vendors.
- Day-to-day operations and oversight.
- Tracking and reporting.
- Internal QA/QC checks.

3.3.2 Communications/Marketing

Each program in the portfolio has a specific marketing and communication strategy to recruit customers in the target audience for the services being delivered. Some paths

may also have an individual marketing and communication strategy. However, at the portfolio level, a broad communication plan that addresses program branding, communication and collateral standards, messaging, and customer service standards for all implementation contractors will be reviewed and revised as needed.

Franklin Energy will lead a marketing group made up of North Shore staff, program managers, and contact center staff to update the overall communication plan as well as detailed plans for individual programs and, where appropriate, paths. Utility staff will provide branding guidelines including trademarks, communication styles and color palettes. Market drivers are consistently reviewed for North Shore, allowing for adjustments to these marketing strategies, messaging, and specific unique program tactics. In general, the goals of the communication plan are to:

- Ensure awareness and participation to meet energy saving goals during the Plan 3 period, to the extent possible within the Cap.
- Deliver a clear, consistent, compelling message about the benefits of energy efficiency and provide a call to action.
- Build a strong marketing channel through the trade allies.
- Manage expectations regarding program availability, offerings, and incentives.
- Coordinate closely with other utilities, energy efficiency program providers, such as the DCEO, Elevate Energy, and the Historic Chicago Bungalow Association, as well as key industry and trade ally associations and organizations, such as Retrofit Chicago and the Illinois Dry Cleaners Association.

A multi-pronged marketing communication approach will be utilized to establish awareness of the portfolio. Primary channels for overall program awareness:

- Mass Communications Outlets – Bill messaging, bill inserts, e-bill messaging, newsletters, and website promotions are a few of the existing low cost mass communication vehicles available to build program awareness.
- Program Field Staff – Franklin Energy staff conduct targeted outreach to relevant customer groups and industry associations in addition to working with the customers daily.
- Stakeholder Account Managers – Franklin Energy will leverage the existing relationships utility account managers have with larger customers. Utility account managers will serve as a conduit to inform customers of the energy efficiency programs.
- Trade Allies – This channel reaches customers through existing relationships so that the program can influence a buying decision. Franklin Energy provides marketing materials and training to ensure trade allies understand the various programs available, terms and conditions to which they must comply, and required procedures.

- Direct Delivery – Franklin Energy develops marketing materials that are incorporated into program training sessions, mailed directly to customers, and distributed at events.
- Targeted Relationship Marketing – Strategies by sector, region, business type, or end-use to target specific audiences to increase the effectiveness of promotional activities.

Marketing effectiveness will be closely monitored so that marketing strategies and tactics can be altered based on program performance and marketplace opportunities. Increased marketing effectiveness will result in improved cost-effectiveness of the portfolio.

3.3.3 Customer Service/Contact Center

Contact center operations are critical operational components of the energy efficiency portfolio. Franklin Energy is responsible for establishing, staffing, and reporting on contact center activities to support the North Shore programs. The contact center goals are to:

- Support the portfolio of energy efficiency programs.
- Minimize impact on the utility contact center.
- Facilitate regular communication between contact centers to cultivate smooth relationship management.
- Respond to customer inquiries on the energy efficiency programs.
- Enable and encourage participation in the energy efficiency programs.

Franklin Energy will utilize its existing contact center to support the North Shore program efforts. Contact center staff handle inquiries about customer and measure eligibility, completing program applications, requests to participate in a program, scheduling, and supporting documentation requirements. Each person handling tele-services is proficient in North Shore offerings, customer qualification, program business rules, paperwork and procedures. Furthermore, contact center staff have completed introductory training on all core technologies which comprise the majority of trade ally and customer inquiries. Ongoing and refresher training is performed as needed. Contact center staff has access to a wide variety of bilingual resources to communicate with customers as needed.

Franklin Energy's contact center meets the expectations regarding North Shore customer care protocol and call center standards. Furthermore, metrics are closely followed to provide the best customer experience. Call volumes, wait times and callback turnaround are closely monitored.

3.3.4 Fulfillment

Franklin Energy is responsible for processing incentive payments, or rebate fulfillment. The programs will continue to receive applications by e-mail, mail and fax, with online applications available where practicable.

The general workflow of the fulfillment process is as follows:

- Receive application and supporting documentation.
- Verify the completeness of the application package.
- Determine customer/program eligibility (account/premises).
- Determine measure/project eligibility.
- Input customer, measure, and energy savings data.
- Request approval for and issue incentive payment.

Franklin Energy will coordinate all quality control reviews related to fulfillment processing. They will track failed or flawed applications to understand and incorporate process improvements to application forms or program design.

3.3.5 Quality Assurance/Quality Control

The quality of an energy efficiency program is ultimately a function of the program staff's ability to deliver results on time, within budget, and to properly track customer and trade ally participation without compromising program specifications.

- Quality Assurance ("QA"). Procedures intended to ensure that a program, product, or performed service meets specified requirements.
- Quality Control ("QC"). Procedures intended to ensure that a program, product, or performed service adheres to a defined set of quality criteria or meets the requirements of the utility, regulators, or customer.

The goal of Quality Assurance is to prevent errors, rework, process problems, fraud, and other quality risks from occurring. Creating quality processes upfront reduces the risk of errors, ultimately ensures better customer/trade ally satisfaction and minimizes the cost of program administration. As a part of the QA strategy, Franklin Energy will:

- Qualify internal employees, providers, and sub-contractors by ensuring proper background checks, verifying credentials, and addressing provider performance requests for proposals and contracts.
- Provide clear standard qualifications/credentials of providers and partners to assure quality workmanship.
- Ensure proper tools, forms, training, and materials are available for employees and other implementers.
- Make every effort to ensure errors are not repeated by identifying errors/ exceptions in testing and providing solutions for errors prior to launching. This includes multiple independent checks and balances built into processes.
- Incorporate anti-fraud protocols specified or approved by the Companies that protect both systems and customer data.
- Utilize common QA tools to meet program specifications. Some of these tools are benchmarking, best practices, process flow charts, design for quality, and lessons learned documentation.
- Conduct periodic inspections for compliance with QA protocols.

The goal of Quality Control is to inspect work to ensure it has met the defined program quality standards. The defined quality standards for North Shore energy efficiency programs are:

- Execute programs in accordance with the business rules established for each program with minimal mistakes and customer service issues.
- Protect utilities' customer data and prevent program fraud, either internal or external.
- Ensure work claimed and charged has been performed as described to meet the requirements of each program through various periodic QC inspections.

During the detailed implementation planning process, Franklin Energy will develop a QC plan that meets these standards, increasing the likelihood that customers and trade allies have a positive experience with the energy efficiency programs. When developing QC protocols, Franklin Energy will consider the following on a program by program basis:

- Decide which specific standards and key performance indicators the product, service or provider must meet from a customer, measure, and provider perspective.
- Determine what QC techniques best determine a product, process, provider, or application failure. Common techniques include data audits/reviews, field inspections, product sampling, invoice reconciliation, contractor reviews, process testing, trade ally surveys and program surveys.
- Collect, track, and analyze key performance indicators and determine the proper corrective action to resolve process failures, improve processes, and provide implementer feedback.
- Determine reporting frequency on key performance indicators customized to the needs of each program.

Franklin Energy's Quality and Continuous Improvement Department conducts all internal process audits, QA/QC reviews and assists with implementation of field work. Franklin Energy's Program Manager is responsible for overall implementation of the program. The Project Coordinator is responsible for day-to-day office activities of the program, assisting field staff in scheduling activities and reviewing project applications. Energy Advisors are responsible for customer visits and audits to ensure the technical review of customer applications is performed properly and accurately. It is their priority to ensure a quality experience for the customer. Franklin Energy's Training Department is responsible for ensuring that all staff members are properly trained for their positions.

3.3.6 Data Management/System

Franklin Energy's Efficiency Manager™ data tracking and reporting system is built upon the Salesforce.com platform that leverages the customer relationship management capability of Salesforce.com. This system has been enhanced to provide a robust and comprehensive utility-scale energy efficiency program data management solution. This

tracking system provides top-tier security, reliability, and functionality. It captures and manages data at all levels of the implementation effort, from program planning data through program delivery and review.

Franklin Energy's tracking system provides real-time access and visibility into energy efficiency projects and applications at every stage, while providing consistent tracking of projected energy savings and other key program information such as marketing leads, outbound marketing campaign success rates, and trade ally activity. In addition to tracking completed projects, Franklin Energy is able to closely monitor the "pipeline" of projects moving forward in order to estimate contributions from upcoming marketing and promotion campaigns. Franklin Energy will be tracking multiple metrics and can report against a plan by location, measure, or other demographic.

3.4 Evaluation

Evaluation is the process of determining and documenting the results, benefits, and lessons learned from an energy efficiency program. Energy efficiency evaluations are conducted to estimate actual energy savings compared to predicted estimates. An evaluation should be viewed as one part of an ongoing process to improve planning and implementation in order to maximize the effectiveness of the program.

There are limited evaluation resources. Therefore, all activity should focus first on programs that have not been evaluated, have been significantly modified, provide the most savings or have activities that were not fully evaluated in the first round of evaluations, such as quantification of spillover.

Two types of evaluation generally undertaken for energy efficiency programs include process and impact evaluations. These are discussed in detail below. A third type of evaluation that is sometimes performed is a market transformation evaluation. Market transformation evaluations attempt to quantify the adoption of a measure in the market place. They analyze the availability and adoption of a product, along with changes in pricing if available and relevant.

North Shore will cooperate with an independent third party evaluation firm to evaluate the programs and measures. The third party evaluator will perform evaluations consistent with generally accepted rules for evaluation and will address net-to-gross ("NTG") matters consistent with the Policy Manual and IL TRM.

Many issues associated with evaluations and the application of evaluation results have been discussed during SAG meetings and in separate meetings focusing on evaluation. North Shore has participated in these meetings. SAG meetings have also been a forum for development of the Illinois Energy Efficiency Policy Manual ("Policy Manual"), which details evaluation policies. North Shore will continue to actively participate in these meetings and evaluation efforts. In addition to SAG meetings, North Shore will continue to participate in bi-weekly meetings with the third party evaluation firm and other interested parties.

3.4.1 Impact Evaluation

The primary objective of impact evaluation is to estimate gross and net energy savings for the programs. These results are used to validate program-claimed savings and to adjust estimates of savings to improve their accuracy.

Although the plan is to evaluate the most important measures offered in the programs, not all measures will be evaluated with the same level of rigor. An important part of the planning will be to prioritize the programs and their measures and define the level of rigor that will be applied to the evaluation for each component. New measures and new processes will be given a higher priority than measures that have already been evaluated or are standard.

3.4.2 Process Evaluation

Timely process evaluations are critical for ensuring (1) that the appropriate information is being tracked and (2) that the program is being implemented effectively and efficiently. Process evaluations provide insights and recommendations to improve each program as well as to ensure the reliability of inputs to the impact evaluation.

Where relevant (particularly where a program is expected to go beyond energy savings to influence various aspects of a market), we will also conduct research to understand and document the relevant market. The primary objective of this effort will be to help program designers and managers structure their programs to achieve cost-effective savings and reduce barriers to participation while maintaining high levels of customer satisfaction.

The process evaluation for each program will include in-depth qualitative interviews with North Shore' staff and program implementers. These interviews will be used to develop a complete understanding of the final design, procedures, and implementation strategies for each program. Through these interviews, available program materials, including marketing and outreach materials such as web-based promotional content, point of purchase (POP) materials, print and radio advertising copy, and any cooperative marketing materials developed, will be collected.

3.5 Reporting

Program reporting serves two key objectives:

- Provide information to regulators needed to assess the programs and their achievements.
- Provide timely information to program implementers needed to manage the programs including progress towards goals and expenses versus budgets.

Quarterly and annual reports will be prepared to meet these objectives. Program evaluation also requires that the information needed to properly evaluate a program is tracked and reported. Each of these items is discussed further below.

Accurate reporting is essential to the successful administration of a program. Program reporting reflects the progress or results of the programs, helps determine program changes that need to be made, and is a key tool used in the decision-making process. Program changes made as a result of reporting can have financial implications, which add to the importance of accurate reporting.

Accurate reporting is also important because it provides needed information to track whether mandated requirements are being met. Most energy efficiency programs have specific goals and benchmarks that must be achieved by certain dates. Accurate reporting provides the vehicle to evaluate whether these goals and benchmarks are being achieved cost-effectively in the allotted time frame and whether goals or programs need to be adjusted.

Providing information for the program evaluation is also an important aspect of reporting. Evaluation is a key aspect in gauging the success of the programs because it:

- Reports if the utilities have met their portfolio goals.
- Reports if a program has met its goals.
- Presents reasons why a program has succeeded or failed.
- May be used for compliance with regulations.

Evaluation relies heavily on data tracking and reporting in order to be comprehensive, reliable, and robust. Evaluation determines whether the portfolio results were cost-effective and feeds into the identification of potential adjustments to the Illinois TRM.

The most important data pieces to track are the total annual energy savings, the total yearly participation and accurately categorized costs. The first two data points are the benchmark for all goals and targets. The costs associated with the savings allows us to track where we are in terms of reaching the cap as well as reviewing cost effectiveness of the program at year end.

Franklin Energy continues to work closely with the EM&V Contractor to ensure the appropriate and needed data is being collected. Franklin Energy has given the EM&V Contractor access to the tracking system to enable timely and direct downloading of data needed for evaluation purposes.

More recently, stakeholders have requested a consistent format for quarterly and annual reporting among all utilities. North Shore has agreed to take an active role in developing standardized reports and will report using the formats agreed to by all.

3.6 Proposed Program Details

This section provides details on the programs that North Shore proposes to include in their gas energy efficiency portfolio.

North Shore is committed to meeting the proposed energy savings targets within the budget allocations in the most cost-effective way. To this end, North Shore requests the

latitude to reallocate funding between programs, to add or delete cost-effective measures, and increase or decrease incentive amounts, at their discretion, to ensure performance criteria are met. North Shore will comply with the Commission's directives in Order No. 10-0564 in making any such changes. North Shore envisions the nature of the portfolio adjustments would relate to specific designs developed in response to customer/implementer feedback and/or rebalancing the portfolio based on individual program performance or emerging market/technology opportunities. Lastly, as North Shore continues to learn from the market response to these and other utility programs, additional programs may be added to enhance the portfolio performance.

The proposed portfolio is a comprehensive set of proven programs that reach all customer classes. All of the programs in the proposed portfolio screened as cost-effective for the 3-year plan period. Furthermore, all programs are scalable, meaning they can easily expand to incorporate additional measures in the future or remove measures that are no longer cost effective.

There are two programs that correspond with customer sectors — Residential and Business. The Residential Program has elements intended to provide a variety of energy efficiency programs for residential dwellings and multi-family units. The Business Program has provisions intended to provide a range of energy efficiency programs for the multitude of small business, commercial, and industrial customers. Each program contains three program paths — Outreach and Education, Assessments, and Rebates/Grants. Each program path contains multiple categories (e.g., Outreach and Education includes behavior change and energy efficiency education).

The DCEO will implement energy efficiency programs designed specifically for the low income and public sector, included in their own plan. Programs that address the public sector are not included in North Shore' portfolio because the DCEO is filing its own plan.[10]

Savings estimates for individual measures or programs have been developed in various manners. This includes calculating impacts using algorithms in the TRM if the measure is listed in the TRM or generally accepted engineering algorithms based on a set of reasonable assumptions to input variables and building simulation modeling. Because of the diversity in equipment and energy consumption patterns across multiple building types and end-uses, there exists a variability in the savings estimates as they relate to program design and target markets. A collaborative effort throughout the planning process between the utilities allowed for comparison of the measures and has led to a consistency in approach, even if the saving values differed. The proposed rebate levels are based mostly on current incentives or on the levels of incentives we believe are needed to encourage customers to pursue efficiency during a time of lower gas costs

[10] Peoples Gas has coordinated with the DCEO and their implementation contractors in the development of a Low Income Program. North Shore shall evaluate the performance of the Peoples Gas Low Income Program during Plan 3 for potential adoption and delivery within the North Shore service territory.

and longer payback periods. We have also tried to balance the impact of higher Incentives against the impact of reaching our budget cap.

Details on each program are provided in the following pages. The Plan 3 for PY7 – PY9 is based on a "One-Stop-Shop" approach to energy efficiency. Each program has a variety of paths in which a customer can participate and provides all customers an opportunity to participate in as much of the program as they want. Each path of a program can serve as an individual, stand-alone activity or as part of complete process to energy efficiency. However, the more the customer does, the more they save. And the more satisfied the customer is with the energy efficiency experience and results, the more likely they are to participate over time.

Table 5: Energy Efficiency Portfolio Summary

Programs	Residential		Business	
Market Offerings	Single Family	Multi-family	Small Business	C&I
Path				
Outreach & Education				
- Behavior	x	x		
- EEE	x	x		
Assessments				
- High level (w/DI)	x	x	x	x
- In Depth		x		
- Gas Optimization		x		x
- RCx				x
- Engineering Studies				x
Rebates/Grants				
- Staffing				x
- Standard Rebate	x	x	x	x
- Partner Trade Ally	x	x	x	
- Local Orgn Partner				
- Custom		x	x	x

3.6.1 Proposed Program Details – Residential Program

North Shore anticipates offering three program paths – Outreach and Education, Assessments, and Rebates/Grants. These paths are designed to work together to offer customers a comprehensive suite of efficiency programs. Each path is described in detail below.

Residential Programs at a Glance

Programs	Residential			
Market Offerings	Single Family		Multi-Family	
	Existing	NC	Existing	NC
Path				
Outreach & Education				
- Behavior	x		x	
- EEE	x		x	
Assessments				
- High level (w/DI)	x		x	
- In Depth			x	
- Gas Optimization			x	
Rebates				
- Standard Rebate	x	x	x	x
- Partner Trade Ally	x		x	
- Custom			x	x

The Residential Program is presented in detail based upon three paths:

Outreach and Education. The path is designed to provide awareness and education that motivates customers to change behavior and implement smaller but meaningful efficiency measures through education and provision of low cost measures. It will also provide information on rebate programs and tie reports to information on incentives available for longer term savings measures. The path is comprised of Home Energy Reports (Behavior Change) and Energy Efficiency Education.

Single Family. The path is designed to help customers save energy via multiple avenues, including energy assessments with direct install of low cost measures, incentives for efficient equipment and incentives for new construction projects. The path targets customers with individually metered residences that are either single family or duplexes and that have natural gas heating.

Multi-Family. The path is designed as a one-stop-shop for customers who live in multi-family buildings and multi-family building owners/property managers. The target audience will be able to access options offered through one point of contact with assistance as needed and requested.

Path	**3.6.1.1 OUTREACH AND EDUCATION**
	Outreach and Education is designed to provide awareness and education that

Path	**3.6.1.1 OUTREACH AND EDUCATION**
Description	motivates customers to change behavior and implement small but meaningful efficiency measures through education and provision of low cost measures. It will also provide information on rebate programs and incentives available for long-term savings measures. ***Home Energy Reports***. Utilizing a software platform that combines energy usage data with customer demographic, housing and GIS data, it benchmarks customer energy use and provides targeted efficiency recommendations and information on other programs in the North Shore portfolio through Home Energy Reports that are mailed directly to the customer's home. The Home Energy Reports include customized recommendations that educate and influence consumers to reduce their energy consumption. The reports and associated web portal provide "neighbor" usage comparisons and suggest opportunities for customers to reduce their usage. The reports are targeted to high natural gas use customers with the greatest potential to capture energy savings. ***Energy Efficiency Education***. Fifth-grade teachers are provided lesson plans and activities aligned with state curriculum standards that are designed to teach students about energy production and conservation. Each student will receive a take-home kit containing energy efficient products to install at home with their families.
Duration	June 1, 2017 through May 31, 2020
Utility Collaboration	The ***Home Energy Reports*** vendor is currently unable to provide reports for North Shore and ComEd jointly. It is the intent of North Shore and ComEd to explore opportunities to cooperate in offering joint reports as they become available and if such collaboration is of mutual benefit for both entities. It is the intent of North Shore to continue to jointly offer ***Energy Efficiency Education*** with ComEd.
Delivery Strategy	***Home Energy Reports.*** A vendor will deliver via a turnkey process. The vendor will develop the reporting and website content, issue the reports according to the designated schedule, track participant savings, and train customer service representatives to field customer questions. Select customers will receive mailed, hard copy reports each heating season that benchmark their energy use, compare their usage to a screened group of like homes and provide targeted recommendations. Customers are selected to receive reports and must submit a request to no longer receive reports (i.e., opt out of receiving reports). Follow-up questionnaires will assess why some customers choose to opt out. The vendor will utilize various methods to identify and mitigate threats to reliability of savings results. ***Energy Efficiency Education.*** A vendor will be jointly selected by North Shore and ComEd to solicit schools to participate, provide teacher lesson plans and deliver student kits. Fifth-grade teachers in participating schools will receive lesson plans and low cost energy efficiency measures to distribute to students for installation at home as a homework assignment. Students and parents will be required to complete a survey, reporting on installations completed. The vendor will maintain contact with educators and report on activity, counts of students versus kits, and other QC processes.
Target Market	***Home Energy Reports*** is targeted to individually-metered customers, with a focus on high natural gas users. ***Energy Efficiency Education*** is applicable to customers with a child in 5th grade that attends a participating school.
Marketing	There is no marketing of ***Home Energy Reports***. The strategy to gain participants is to analyze the customer population to identify high energy users and to target those

Path	3.6.1.1 OUTREACH AND EDUCATION
Strategy	customers for participation. Customers opt out from receiving reports rather than opt in. ***Energy Efficiency Education*** will be offered to schools located in North Shore' service territory. If more educators sign up to participate than is budgeted for, they will be put on a waiting list.
Eligible Measures	There are no measures eligible for incentives in this path. Measures that will be included in kits for students to install at home will be finalized before ***Energy Efficiency Education*** is launched.
Targets	Participation

	PY7	PY8	PY9
Home Energy Reports	46,000	46,000	46,000
Energy Efficiency Education	800	800	800
Total	**46,800**	**46,800**	**46,800**

Annual Savings

	PY7	PY8	PY9
Home Energy Reports	483,920	483,920	483,920
Energy Efficiency Education	8,000	8,000	8,000
Total	**491,920**	**491,920**	**491,920**

Program Budget

Budget Category	PY7	PY8	PY9
Incentives	$0	$0	$0
Third Party Incentives	$0	$0	$0
Implementation	$348,000	$348,000	$348,000
Marketing	$0	$0	$0
TOTAL	**$348,000**	**$348,000**	**$348,000**

Cost-Effectiveness

Ratepayer Impact Measure Test	Utility Cost Test	Total Resource Cost Test	Participant Test
0.70	1.41	1.32	15.34

Path	3.6.1.2 SINGLE FAMILY ASSESSMENTS & REBATES
Description	The Single Family Assessments and Rebates path is designed to help customers save energy via multiple avenues, including energy assessments with direct install of

Path	3.6.1.2 SINGLE FAMILY ASSESSMENTS & REBATES
	low cost measures, incentives for efficient equipment and incentives for new construction projects. ***Energy Assessment and Direct Install.*** Customers will receive a free energy assessment and direct installation of low cost energy and water saving measures including low flow showerheads, kitchen and bathroom faucet aerators, programmable/smart thermostats and pipe insulation (at no cost). Field technicians complete a high level energy assessment to identify other energy saving opportunities and provide the customer with estimated costs and savings for these opportunities. The technician will educate residential customers on financial incentives available for eligible measures identified during the assessment and provide referrals for appropriate vendors. ***Rebates.*** Customers may receive incentives for the purchase and installation of higher efficiency furnaces, boilers, thermostats and insulation/air sealing. The incentives offset the incremental cost of high efficiency equipment and the cost of installation. Trade allies install measures and engage customers. ***New Construction.*** Incentives will be available to customers/contractors that build a single family home above the current building code.
Duration	June 1, 2017 through May 31, 2020
Utility Collaboration	It is the intent of North Shore to cooperate with ComEd to offer this path as there are some measures that could benefit both gas and electric energy use. In addition, the utilities will collaborate in educating customers and trade allies on the benefits of energy efficiency. North Shore and ComEd will continue to offer ***Direct Install*** jointly.
Delivery Strategy	***Direct Install.*** A technician will perform a high level assessment and install low cost energy and water savings measures. The assessment will identify energy savings opportunities as well as estimates of costs and savings so the resident can prioritize future actions based on payback if desired. Customers will be educated on available financial incentives offered by North Shore. ***Rebates.*** In general, incentives for high efficiency equipment are based on approximately 50% of incremental costs. Actual incentives are provided in the table of eligible measures. North Shore requests authority to revise eligible measures and incentives as driven by current market conditions, changes to codes and standards, technology, EM&V results, and management knowledge. North Shore will develop a network of weatherization trade allies based upon qualified contractors that apply to participate. Customers will be required to utilize a partner trade ally to receive weatherization incentives. An online and hardcopy application will be available to customers and trade allies. ***New Construction.*** North Shore will offer incentives to encourage customers and builders to push building efficiency beyond what is required through compliance with current building code. North Shore will utilize support from contractors to promote the benefits of building above the current building code. **Quality control activities will include**: • Field inspections to confirm installation and eligibility for at least 2.5% of rebated equipment. • Transaction surveys to measure customer satisfaction and identify potential measure and process improvements. • Trade ally advisory groups and surveys to ensure the process is easy to work with and helpful to trade allies in selling high efficiency equipment.
Target	The path targets customers with individually metered residences that are either single family or duplexes and that have natural gas heating. Customers must be an active North Shore residential customer. Both owner-occupied and rental premises are

<table>
<tr><td>Path</td><td>3.6.1.2 SINGLE FAMILY ASSESSMENTS & REBATES</td></tr>
<tr><td>Market</td><td>eligible provided the purpose of the premises is for a residential dwelling.</td></tr>
<tr><td>Marketing Strategy</td><td>The marketing strategy will continue to be building awareness of the paths available for participation. Messaging will be aimed at two audiences: 1) property owners and 2) dealers, distributors, contractors and other trade allies.

Campaigns directed at home owners will include bill inserts, newsletters, public relations, and other special events, all supported by the North Shore website. North Shore will also work with community and neighborhood organizations to promote Direct Install.

The tactics for trade ally involvement will be to provide marketing support and periodic trade ally incentives. Trade ally support and engagement is a key element to the success of energy efficiency programs. Franklin Energy will establish trade ally advisory groups to educate and ultimately champion the path. Different trade ally groups will be established for equipment versus building envelope improvements versus new home construction.</td></tr>
<tr><td>Eligible Measures</td><td>Eligible measures and their incentives may include the following:

<table>
<tr><th>Measure</th><th>Per Unit Incentive</th></tr>
<tr><td>Boiler - DHW Two-in-One</td><td>$600</td></tr>
<tr><td>Boiler ≥90% AFUE, <300MBh (SF)</td><td>$400</td></tr>
<tr><td>Boiler ≥95% AFUE, <300MBh (SF)</td><td>$500</td></tr>
<tr><td>Furnace >95% AFUE</td><td>$150</td></tr>
<tr><td>Furnace >97% AFUE</td><td>$200</td></tr>
<tr><td>Programmable Thermostat</td><td>$20</td></tr>
<tr><td>Advanced Thermostat</td><td>$50</td></tr>
<tr><td>Air Sealing</td><td>$0.40 per CFM</td></tr>
<tr><td>Attic Insulation</td><td>$0.30 per sq.ft.</td></tr>
<tr><td>Duct Sealing</td><td>$2.00 per CFM</td></tr>
<tr><td>New Construction 20-25% over IL 2015 Code</td><td>$1,000</td></tr>
<tr><td>New Construction 25-30% over IL 2015 Code</td><td>$1,250</td></tr>
<tr><td>New Construction 30-40% over IL 2015 Code</td><td>$1,750</td></tr>
<tr><td>New Construction ≥40% over IL 2015 Code</td><td>$2,500</td></tr>
</table></td></tr>
<tr><td>Targets</td><td>Participation

<table>
<tr><th></th><th>PY7</th><th>PY8</th><th>PY9</th></tr>
<tr><td>Energy Assessment & Direct Install</td><td>2,500</td><td>2,300</td><td>2,500</td></tr>
<tr><td>Rebates & New Construction</td><td>623</td><td>606</td><td>623</td></tr>
<tr><td>Total</td><td>3,123</td><td>2,906</td><td>3,123</td></tr>
</table>
Annual Savings

<table>
<tr><th></th><th>PY7</th><th>PY8</th><th>PY9</th></tr>
<tr><td>Energy Assessment & Direct Install</td><td>143,192</td><td>131,735</td><td>143,192</td></tr>
<tr><td>Rebates & New Construction</td><td>182,983</td><td>176,730</td><td>182,983</td></tr>
<tr><td>Total</td><td>326,176</td><td>308,465</td><td>326,176</td></tr>
</table>
Program Budget</td></tr>
</table>

Path	**3.6.1.2 SINGLE FAMILY ASSESSMENTS & REBATES**

Budget Category	PY7	PY8	PY9
Incentives	$202,470	$191,970	$202,470
Third Party Incentives	$294,280	$270,735	$294,280
Implementation	$268,805	$186,682	$268,805
Marketing	$62,280	$36,480	$62,280
TOTAL	**$827,835**	**$685,867**	**$827,835**

Cost-Effectiveness

Ratepayer Impact Measure Test	Utility Cost Test	Total Resource Cost Test	Participant Test
1.21	5.81	2.21	2.59

Path	**3.6.1.3 MULTI-FAMILY ASSESSMENTS & REBATES/GRANTS**
Description	Multi-Family Assessment and Rebates/Grants targets customers who live in multi-family buildings and multi-family building owners/property managers. The path is designed as a one-stop-shop, meaning that the target audience will be able to access all offerings through one point of contact with assistance as needed and requested. ***Energy Assessment and Direct Install***. An energy advisor performs a comprehensive energy audit of the building and makes recommendations for direct install and rebate opportunities. A report is provided to building owners/managers on the energy and water saving opportunities present within their facility. Residents receive direct installation of low cost energy and water saving measures including low flow showerheads, kitchen and bathroom faucet aerators, programmable/smart thermostats and pipe insulation (at no cost). ***Rebates – Standard and Partner Trade Ally (PTA)***. Pre-qualified, standardized rebates are available for measures such as heating systems, steam traps, and pipe insulation. Incentives are based on the size and efficiency of the equipment installed. A network of selected trade allies, screened and registered, offer measures with higher incentives (20%-30% higher on average). ***Rebates – Custom***. Customers may receive incentives for non-standard measures, including new construction projects. Incentives are calculated on a $/first year therm savings basis. ***Gas Optimization***. An energy advisor/engineer performs an advanced gas usage study to identify operation and maintenance issues as well as energy conservation measures related to the building heat system. Qualifying buildings must be 75,000 square feet or more and use a minimum of 60,000 therms per year.
Duration	June 1, 2017 through May 31, 2020
Utility Collaboration	It is the intent of North Shore to cooperate with ComEd to offer the path as there are some measures that could benefit both gas and electric energy use. In addition, the utilities will collaborate in educating customers and trade allies on the benefits of energy efficiency. North Shore and ComEd will continue to offer ***Direct Install*** jointly.
Delivery Strategy	***Direct Install.*** Technicians will perform the building energy assessment and install low cost energy and water savings measures in customer units. An energy advisor will perform a comprehensive energy audit of the entire complex and provide recommendations for direct install, trade ally partner, and standard installation opportunities. A report is provided to building owners/managers on the energy saving opportunities. ***Rebates.*** Standard incentives will be offered to building owners along with an option for owners to use a group of registered trade ally partners who will offer upgrades at a higher incentive. The Company will develop a network of partner trade allies based upon qualified contractors that apply to participate. *Standard/PTA* incentives for high efficiency equipment are based on approximately 30-70% of incremental costs. Actual incentives are provided in the table of eligible measures. *Custom* incentives are based on the lesser of a buy down to a 1-year payback, 50% of the project cost, or a $/therm saved during the first year. North Shore requests authority to revise eligible measures and incentives as driven by current market conditions, changes to codes and standards, technology, EM&V results, and management knowledge. An online and hardcopy application will be available to customers and trade allies. ***Gas Optimization.*** Services will be delivered by staff and independent engineering firms with expertise uncovering these types of opportunities.

Path	**3.6.1.3 MULTI-FAMILY ASSESSMENTS & REBATES/GRANTS**
	Quality control activities will include: • Field inspections to confirm installation and eligibility for at least 2.5% of rebated equipment. • Transaction surveys to measure customer satisfaction and identify potential measure and process improvements. • Trade ally advisory groups and surveys to ensure the process is easy to work with and helpful to trade allies in selling high efficiency equipment.
Target Market	The path targets individually metered and central metered multi-family buildings not served by the Residential market offering. Customers must be an active North Shore customer. Community Development housing projects not served by the DCEO and Federally-owned multi-family housing structures will be a target market sector. Assisted living and nursing homes may also be possible market targets.
Marketing Strategy	The path will be marketed primarily through partnerships with building owners, property managers and real estate professionals. North Shore and partners will use strategic communication channels to inform building owners about the path and recruit new participants. The primary outreach strategies will involve working with key businesses, institutions, associations and organizations that are already connected with a broad range of local property owners. Case studies, testimonials, and presentations will feature successes of participation.

Path	3.6.1.3 MULTI-FAMILY ASSESSMENTS & REBATES/GRANTS

Eligible Measures

Eligible measures and their incentives may include the following:

Measure	Per Unit Incentive
Custom Rebate / Gas Optimization	$1.00 per therm

Measure	Unit	Std Per Unit Incentive	PTA Per Unit Incentive
Air Sealing (MF)	CFM	n/a	$0.40
Duct Sealing (MF)	CFM_25	n/a	$2.00
Boiler ≥88% AFUE, <300MBh	MBH	$2.25	$3.00
Boiler ≥88% AFUE, ≥300MBh TE	MBH	$2.50	$3.00
Boiler Reset Controls	each	$100	$120
Boiler Tune Up	MBH	$0.40	$0.40
Condensing Unit Heater	MBH	$2.00	$2.50
Direct Fired Heaters	MBH	$1.00	$1.00
Furnace >95% AFUE	each	$275	$325
Furnace >95% AFUE (In Unit)	each	n/a	$200
High Speed Washer	lb-capacity	$4.00	$5.00
Infrared Heater	MBH	$2.50	$3.00
Ozone Laundry	lb-capacity	$20	$25
Pipe Insulation - Boiler Small	ft	$1.00	$1.50
Pipe Insulation - Boiler Medium	ft	$1.25	$1.88
Pipe Insulation - Boiler Large	ft	$1.50	$2.25
Pipe Insulation - HW Small	ft	$1.00	$1.25
Pipe Insulation - HW Medium	ft	$1.25	$1.50
Pipe Insulation - HW Large	ft	$1.50	$2.00
Pipe Insulation - Steam - Small	ft	$2.75	$4.00
Pipe Insulation - Steam - Medium	ft	$4.25	$6.00
Pipe Insulation - Steam - Large	ft	$5.75	$8.00
Pipe Insulation - Steam - X-Large	ft	$10.00	$15.00
Pipe Insulation - Steam Med Fitting	each	$5.00	$9.00
Pipe Insulation - Steam Large Fitting	each	$7.00	$14.00
Pipe Insulation - Steam X-Large Fitting	each	$14.00	$13.00
Pipe Insulation - Steam Med Valve	each	$13.00	$20.00
Pipe Insulation - Steam Large Valve	each	$20.00	$35.00
Pipe Insulation - Steam X-Large Valve	each	$28.00	$48.00
Steam Boiler ≥82% AFUE	MBH	$2.00	$2.25
Steam Boiler Averaging Controls	each	$100	$150
Steam Traps - Dry Cleaner/Industrial	each	$150	$200
Steam Traps - HVAC Repair/Rep - Audit	each	$120	$200
Steam Traps - HVAC Repair/Rep - No Audit	each	$30.00	$30.00
Steam Traps - Test	each	$10.00	$15.00
Thermostat - Programmable	each	$25.00	$100.00
Water Heater 88% TE - Central Plant	unit	$30.00	$30.00
Water Heater 88% TE - Central Plant (Lodging)	MBH	$2.50	$2.50

Path	3.6.1.3 MULTI-FAMILY ASSESSMENTS & REBATES/GRANTS

Targets

Participation

	PY7	PY8	PY9
Energy Assessment & Direct Install	750	500	750
Rebates - Standard & PTA	17	17	17
Rebates - Custom	2	2	2
Gas Optimization	0	0	0
Total	**769**	**519**	**769**

Annual Savings

	PY7	PY8	PY9
Energy Assessment & Direct Install	20,456	13,623	20,456
Rebates - Standard & PTA	15,614	15,614	15,614
Rebates - Custom	2,028	2,028	2,028
Gas Optimization	0	0	0
Total	**38,098**	**31,265**	**38,098**

Program Budget

Budget Category	PY7	PY8	PY9
Incentives	$12,784	$12,784	$12,784
Third Party Incentives	$42,481	$28,294	$42,481
Implementation	$52,600	$30,590	$52,600
Marketing	$6,300	$4,465	$6,300
TOTAL	**$114,165**	**$76,133**	**$114,165**

Cost-Effectiveness

Ratepayer Impact Measure Test	Utility Cost Test	Total Resource Cost Test	Participant Test
1.42	4.80	2.36	2.35

3.6.2 Proposed Program Details - Business Programs

North Shore anticipates offering two paths – Assessments and Rebates/Grants – for Business customers. These paths are designed to work together to offer customers a comprehensive program. Each path is described in detail below for business and small business customers.

Business Programs at a Glance

Program	Business			
Market Offering	Small Business		C&I	
	Existing	NC	Existing	NC
Path				
Assessments				
- High level (w/DI if appro)	x		x	
- Gas Optimization			x	
- RCx			x	
- Engineering Studies			x	
Rebates/Grants				
- Staffing			x	
- Standard Rebate	x	x	x	x
- Partner Trade Ally	x	x		
- Custom	x	x	x	x

Path	**3.6.2.1 SMALL BUSINESS ASSESSMENTS & REBATES**
Description	Small business owners are often time-constrained, unaware of energy efficiency opportunities, and lack dedicated staff who concentrate on the facility's energy use. As such, they are a hard-to-reach target audience. While many business owners are also the property owner, some lease their space and consequently have little motivation to make major improvements to their tenant's premises. ***Direct Install***. Customers receive direct installation of low cost energy and water saving measures including low flow showerheads, kitchen and bathroom faucet aerators, pipe insulation and, if applicable, pre-rinse sprayers (at no cost). A high level assessment of the business will be completed while at the site to identify additional energy efficiency improvements the small business owner/tenant can pursue. ***Prescriptive Rebates.*** Pre-qualified, standardized rebates are available for the most common efficiency upgrades, such as heating systems, steam traps, and pipe insulation. Incentives are based on the size and efficiency of the equipment installed. ***Partner Trade Ally (PTA).*** A network of trade allies promote measures and assist in engaging customers to participate in site assessments to identify additional savings opportunities. Customers will be eligible for enhanced rebate levels. ***Upstream Prescriptive Rebates***. North Shore anticipates offering upstream commercial kitchen equipment incentives. North Shore will continue to explore and develop upstream and mid-stream rebates where effective. ***Custom Incentives.*** Customers may receive incentives for non-standard measures, including new construction projects. Incentives are calculated on a $/first year therm savings basis. Staff will work with customers to identify and quantify savings opportunities for complex projects.
Duration	June 1, 2017 through May 31, 2020
Utility Collaboration	It is the intent of North Shore to cooperate with ComEd to offer this path. Measures that could benefit both gas and electric energy use may be offered jointly, where possible, and be made transparent to the customer. In addition, the utilities will collaborate in raising awareness of and educating customers on the benefits of energy efficiency.
Delivery Strategy	The path utilizes a mix of staff and a list of qualified contractors to perform direct installation of low cost measures, the high level assessments, and deeper retrofits on a shared cost basis. The trade allies will continue to promote high efficiency equipment whenever possible. ***Direct Install***. North Shore will engage staff and/or vendors to conduct a high level assessment of the facility to identify energy improvement opportunities that the building owner or business can implement. ***Prescriptive/Partner Trade Ally (PTA) Rebates*** are based on approximately 50% of incremental costs. Proposed incentives are provided in the table of eligible measures. Prescriptive incentives will be offered along with an option to use a group of registered trade ally partners who will offer upgrades at a higher incentive. North Shore will develop a network of partner trade allies based upon qualified contractors that apply to participate. ***Upstream Prescriptive Rebates*** will be determined with commercial kitchen suppliers and other potential partners. ***Custom Rebates*** are based on the lesser of a buy down to a 1-year payback, 50% project cost, or a $/therm saved during the first year. North Shore requests authority to revise eligible measures and incentives as driven by current market conditions, changes to codes and standards, technology, EM&V results, and management knowledge. **Quality control activities will include**:

<table>
<tr><td>Path</td><td>3.6.2.1 SMALL BUSINESS ASSESSMENTS & REBATES</td></tr>
<tr><td></td><td>• Field inspections to confirm installation and eligibility.
• Transaction surveys to measure customer satisfaction and identify potential eligible measure and process improvements.
• Trade ally advisory groups and surveys to ensure the process is easy to work with and helpful to trade allies in selling high efficiency equipment.</td></tr>
<tr><td>Target Market</td><td>The path is targeted to small business customers with an annual usage of approximately less than 150,000 therms per year. Both owner-occupied and rental properties are eligible. Likely business types include strip malls, main street businesses, and business district establishments, theaters, restaurants, convenience stores, etc. Customers must be an active North Shore C&I customer.</td></tr>
<tr><td>Marketing Strategy</td><td>The marketing strategy includes provisions for trade allies to drive activity by marketing services to small business customers as part of the trade allies' normal day-to-day business. North Shore will also look at geographic-focused marketing (i.e., business districts within North Shore territory) and industry targeting to increase awareness of the offering. This will involve working directly with established groups such as the City of Chicago Chamber of Commerce, or business associations (e.g., restaurant association, dry cleaners association).</td></tr>
<tr><td>Eligible Measures</td><td>Eligible measures and their incentives may include the following:
<table>
<tr><th>Measure</th><th>Per Unit Incentive</th></tr>
<tr><td>Custom Rebate</td><td>$1.00 per therm</td></tr>
</table>
</td></tr>
</table>

Path	3.6.2.1 SMALL BUSINESS ASSESSMENTS & REBATES

Measure	Unit	Std Per Unit Incentive	PTA Per Unit Incentive
Boiler ≥88% AFUE, <300MBh	MBH	$2.25	$3.00
Boiler ≥88% AFUE, ≥300MBh TE	MBH	$2.50	$3.00
Boiler Reset Controls	each	$100	$120
Boiler Tune Up	MBH	$0.40	$0.40
Condensing Unit Heater	MBH	$2.00	$2.50
DCV - Kitchen	each	$750	$975
Direct Fired Heaters	MBH	$1.00	$1.00
High Speed Washer - Hotel/Hospital/Laundromat	lb-capacity	$4.00	$5.00
Infrared Heater	MBH	$2.50	$3.00
Modulating Commercial Gas Clothes Dryer	each	$300	$300
Ozone Laundry	lb-capacity	$20.00	$25.00
Pipe Insulation - Dry Cleaners	ft	$1.50	$2.00
Pipe Insulation - HW Small	ft	$1.00	$1.50
Pipe Insulation - HW Medium	ft	$1.25	$1.88
Pipe Insulation - HW Large	ft	$1.50	$2.25
Pipe Insulation - Steam - Small	ft	$4.00	$6.00
Pipe Insulation - Steam - Medium	ft	$6.00	$9.00
Pipe Insulation - Steam - Large	ft	$8.00	$12.00
Pipe Insulation - Steam - X-Large	ft	$15.00	$22.50
Pipe Insulation - Steam Med Fitting	each	$9.00	$13.50
Pipe Insulation - Steam Large Fitting	each	$15.00	$22.00
Pipe Insulation - Steam X-Large Fitting	each	$25.00	$34.00
Pipe Insulation - Steam Med Valve	each	$17.00	$24.00
Pipe Insulation - Steam Large Valve	each	$27.00	$40.50
Pipe Insulation - Steam X-Large Valve	each	$37.00	$55.50
Pre Rinse Sprayer	each	$28.00	$75.00
Steam Boiler ≥82% AFUE	MBH	$2.00	$2.25
Steam Traps - Dry Cleaner/Industrial	each	$150	$200
Steam Traps - HVAC Repair/Rep - Audit	each	$120	$200
Steam Traps - HVAC Repair/Rep - No Audit	each	$30.00	$30.00
Steam Traps - Test	each	$10.00	$15.00
Thermostat - Programmable	each	$25.00	$100.00
Water Heater - Storage 88% TE ≥75MBh	each	$200	$275
Water Heater 88% TE - Central Plant (Lodging)	MBH	$2.50	$2.50
Water Heater ≥88% TE - Laundromat	MBH	$1.50	$2.50
Double Rack Oven	each	$1,000	
Energy Star Convection Oven	each	$50	
Energy Star Conveyer Oven	each	$500	
Energy Star Fryer	each	$500	
Energy Star Steamer	each	$200	
Heat Recovery Grease Trap Filter	each	$500	
Infrared Charbroiler	each	$500	
Infrared Rotisserie Oven	each	$500	
Infrared Salamander Broiler	each	$300	
Infrared Upright Broiler	each	$1,000	

Path	3.6.2.1 SMALL BUSINESS ASSESSMENTS & REBATES
Targets	

Participation

	PY7	PY8	PY9
Direct Install	12	12	12
Rebates - Standard/Custom	57	57	57
Total	**69**	**69**	**69**

Annual Savings

	PY7	PY8	PY9
Direct Install	5,796	5,796	5,796
Rebates - Standard/Custom	29,738	29,738	29,738
Total	**35,534**	**35,534**	**35,534**

Program Budget

Budget Category	PY7	PY8	PY9
Incentives	$16,365	$16,365	$16,365
Third Party Incentives	$5,255	$5,255	$5,255
Implementation	$15,975	$15,000	$15,975
Marketing	$6,400	$5,600	$6,400
TOTAL	**$43,995**	**$42,220**	**$43,995**

Cost-Effectiveness

Ratepayer Impact Measure Test	Utility Cost Test	Total Resource Cost Test	Participant Test
1.74	9.01	3.18	2.18

Path	**3.6.2.2 BUSINESS ASSESSMENTS AND REBATES/GRANTS**
Description	The Business Assessments and Rebates/Grants path is designed as a one-stop-shop that allows all business customers to access all offerings based on their needs. ***Direct Install***. Health care facility customers will receive direct installation of laminar flow restrictors as well as a high level assessment that identifies other energy saving opportunities. The intent is to establish an ongoing relationship with a customer by introducing them to quick saving measures and start to discuss major retrofits and other services available. ***Rebates.*** Rebates will be available for business customers of any size. *Prescriptive Rebates.* Pre-qualified, standardized rebates are available for the most common efficiency upgrades, such as heating systems, steam traps, and pipe insulation. The incentives are based on the size and efficiency of the equipment installed. *Upstream Prescriptive Rebates*. North Shore anticipates offering upstream commercial kitchen equipment incentives. North Shore will continue to explore and develop upstream and mid-stream rebates where effective. *Custom.* Customers may receive incentives for non-standard measures, including new construction projects. Incentives are calculated on a $/first year therm savings basis. Staff will work with customers to identify and quantify savings opportunities for complex projects. New construction incentives are designed to push building efficiency beyond what is required through compliance with building codes, through an integrated, comprehensive, whole-building analysis early in the design phase. ***Gas Optimization Studies.*** Studies that focus on identifying low-cost or no-cost "actionable" measures for building heating, central steam plant and/or process heating energy optimization. The studies will incorporate limited monitoring and testing as necessary. ***Engineering Studies.*** Incentives to offset the costs of energy audits or implementation studies. Based on the findings of such studies, customers can select improvements that qualify for prescriptive or custom rebates. Customers will be able to take advantage of cost sharing for implementation studies, investment-grade audits, and process evaluations needed for large custom, capital-intensive projects. ***Staffing Grants.*** Assist customers to overcome internal operational hurdles to identify, plan, and implement on-site energy efficiency projects. ***Retro-Commissioning.*** Studies that identify measures and actions to reduce energy usage.
Duration	June 1, 2017 through May 31, 2020
Utility Collaboration	It is the intent of North Shore to cooperate with ComEd to offer this path. Measures that could benefit both gas and electric energy use may be offered jointly, where possible, and be made transparent to the customer. In addition, the utilities will collaborate in raising awareness of and educating customers on the benefits of energy efficiency.
Delivery Strategy	The path will be offered through a combination of Franklin Energy and vendors. ***Direct Install***. North Shore will engage staff and/or vendors to conduct a high level assessment of the facility to identify energy improvement opportunities that the building owner or business can implement. ***Rebates.*** *Prescriptive Rebates* are based on approximately 50% of incremental costs. Actual incentives are provided in the table of eligible measures. *Upstream Prescriptive Rebates* will be determined with commercial kitchen suppliers

Path	3.6.2.2 BUSINESS ASSESSMENTS AND REBATES/GRANTS
	and other potential partners. *Custom Rebates* are based on the lesser of a buy down to a 1 year payback, 50% of project costs, or a $/therm saved during the first year. North Shore requests authority to revise eligible measures and incentives as driven by current market conditions, changes to codes and standards, technology, EM&V results, and management knowledge. ***Gas Optimization Studies.*** North Shore will engage staff and/or vendors to conduct studies that focus on identifying low-cost or no-cost "actionable" measures for building heating, central steam plant and/or process heating energy optimization. The studies will incorporate limited monitoring and testing as necessary. Customers may receive a study value up to $15,000 at no charge provided they agree to implement the lesser of $10,000 or all quick-payback measures identified. ***Engineering Studies.*** Incentives to offset the costs of energy audits or implementation studies. Based on the findings of such studies, customers can select improvements that qualify for prescriptive or custom rebates. ***Staffing.*** North Shore will engage staff and/or vendors to provide staffing support, including: *Embedded Energy Advisor*. A dedicated engineer/advisor will work on-site for a fixed number of hours per week and work closely with customer staff to help explore, plan, and implement energy-saving projects. Assistance will include quantifying savings, prioritizing projects, overseeing contractors, and project documentation for rebate applications. *Strategic Energy Management.* Large-account customers will be able to leverage building and energy modeling software to remotely analyze and manage energy use in innovative ways. *Staffing Grants*. Grants of up to $50,000 to assist in funding new full- or part-time employees, better leverage existing staff, or select a consultant to manage, engineer, or supervise the implementation of natural gas efficiency projects that otherwise would not be implemented due to limited staff time. ***Retro-Commissioning (RCx):*** Four options are available to serve C&I customers of all sizes. • *Standard RCx.* Facilities ≥400,000 sq. ft. receive a fully- funded study valued at up to $100,000, with a commitment to spend a minimum amount on identified measures. • *RCxpress.* Facilities 150,000 < 400,000 sq. ft. receive a fully-funded study valued at up to $25,000, with a commitment to spend a minimum amount on identified measures. • *Monitoring-based Commissioning (MBCx):* Facilities ≥400,000 sq. ft. receive an incentive upon integration of MBCx software, along with an additional incentive based on verified energy savings. • *RCx Building Tune-Up*: Small facilities receive a fully-funded study and implementation of selected improvements at no cost. **Quality Control** Field inspections will be performed on a minimum of 2.5% of installations with incentives less than $10,000 and on all projects with incentives greater than $10,000.
Target Market	The path is targeted to all C&I customers. Both owner-occupied and leased commercial and industrial buildings under this customer classification are eligible.
Marketing	The path will market to both end use customers and trade allies. Trade ally support and engagement is a key element to the success of energy efficiency programs. Franklin Energy will establish and educate trade ally working groups who will

<table>
<tr><td>Path</td><td>3.6.2.2 BUSINESS ASSESSMENTS AND REBATES/GRANTS</td></tr>
<tr><td>Strategy</td><td>ultimately champion the path. The path will rely on wholesale and retail trade allies to assist in marketing.
Franklin Energy will evaluate the possible use of direct mail, email, case studies, technical fact sheets, brochures, training sessions, point of purchase materials, collateral materials, and various public relations activities to raise awareness. North Shore will also pursue opportunities to cooperatively promote the path with ComEd, especially for new construction projects.</td></tr>
<tr><td>Eligible Measures</td><td>Eligible measures and their incentives may include the following:
<table>
<tr><th>Measure</th><th>Per Unit Incentive</th></tr>
<tr><td>Custom Rebate / Gas Optimization</td><td>$1.00 per therm</td></tr>
</table>
</td></tr>
</table>

Path	3.6.2.2 BUSINESS ASSESSMENTS AND REBATES/GRANTS

Measure	Unit	Per Unit Incentive
Boiler ≥88% AFUE, <300MBh	MBH	$2.25
Boiler ≥88% AFUE, ≥300MBh TE	MBH	$2.50
Boiler Reset Controls	each	$100
Boiler Tune Up	MBH	$0.40
Condensing Unit Heater	MBH	$2.00
DCV - Kitchen	each	$750
Direct Fired Heaters	MBH	$1.00
High Speed Washer - Hotel/Motel/Hospital	lb-capacity	$4.00
Infrared Heater	MBH	$2.50
Modulating Commercial Gas Clothes Dryer	each	$300
Ozone Laundry	lb-capacity	$20.00
Pipe Insulation - HW Small	ft	$1.00
Pipe Insulation - HW Medium	ft	$1.25
Pipe Insulation - HW Large	ft	$1.50
Pipe Insulation - Steam - Small	ft	$4.00
Pipe Insulation - Steam - Medium	ft	$6.00
Pipe Insulation - Steam - Large	ft	$8.00
Pipe Insulation - Steam - X-Large	ft	$15.00
Pipe Insulation - Steam Med Fitting	each	$9.00
Pipe Insulation - Steam Large Fitting	each	$15.00
Pipe Insulation - Steam X-Large Fitting	each	$25.00
Pipe Insulation - Steam Med Valve	each	$17.00
Pipe Insulation - Steam Large Valve	each	$27.00
Pipe Insulation - Steam X-Large Valve	each	$37.00
Pre Rinse Sprayer	each	$28.00
Steam Boiler ≥82% AFUE	MBH	$2.00
Steam Traps - Dry Cleaner/Industrial	each	$150
Steam Traps - HVAC Repair/Rep - Audit	each	$120
Steam Traps - HVAC Repair/Rep - No Audit	each	$30.00
Steam Traps - Test	each	$10.00
Thermostat - Programmable	each	$25.00
Water Heater - Storage 88% TE ≥75MBh	each	$200
Water Heater 88% TE - Central Plant (Lodging)	MBH	$2.50
Double Rack Oven	each	$1,000
Energy Star Convection Oven	each	$50.00
Energy Star Conveyer Oven	each	$500
Energy Star Fryer	each	$500
Energy Star Steamer	each	$200
Heat Recovery Grease Trap Filter	each	$500
Infrared Charbroiler	each	$500
Infrared Rotisserie Oven	each	$500
Infrared Salamander Broiler	each	$300
Infrared Upright Broiler	each	$1,000

Path	3.6.2.2 BUSINESS ASSESSMENTS AND REBATES/GRANTS
Targets	

Participation

	PY7	PY8	PY9
Direct Install	2	2	2
Rebates - Standard/Custom	357	357	357
Gas Optimization	7	7	7
Retrocommissioning	0	0	0
Total	**366**	**366**	**366**

Annual Savings

	PY7	PY8	PY9
Direct Install	5,887	5,887	5,887
Rebates - Standard/Custom	307,329	307,329	307,329
Gas Optimization	252,042	252,042	252,042
Retrocommissioning	0	0	0
Total	**565,258**	**565,258**	**565,258**

Program Budget

Budget Category	PY7	PY8	PY9
Incentives	$484,313	$484,313	$484,313
Third Party Incentives	$132,603	$132,603	$132,603
Implementation	$286,579	$239,700	$286,579
Marketing	$52,900	$41,554	$52,900
TOTAL	**$956,395**	**$898,170**	**$956,395**

Cost-Effectiveness

Ratepayer Impact Measure Test	Utility Cost Test	Total Resource Cost Test	Participant Test
1.47	4.98	2.06	1.81